

REMARKS

In the Office Action¹, the Examiner rejected claims 1, 3-14, 16-26, and 28-43 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,802,467 to Salazar et al. ("*Salazar*") in view of U.S. Patent No. 6,061,435 to Grundvig et al. ("*Grundvig*") and further in view of U.S. Patent No. 6,243,022 to Furukawa ("*Furukawa*"); and rejected claims 2, 15, and 27 under 35 U.S.C. § 103(a) as being unpatentable over *Salazar* in view of *Grundvig* and *Furukawa* and further in view of U.S. Patent No. 6,470,189 to Hill et al. ("*Hill*").

By this response, Applicants amend claims 1, 8, 9, 13, 14, 21, 22, 26, 33, 34, 40, and 42.

Applicants respectfully traverse the rejection of claims 1, 3-14, 16-26, and 28-43 under 35 U.S.C. § 103(a). Independent claim 1, for example, recites a telephone set including a connection means to execute a connecting process for enabling transmission and reception of an information signal by radio communication to and from a first home appliance which supports audio transmission or reception by radio communication with a second home appliance, the first home appliance being remote-controllable by a "radio communication control protocol [] used by the telephone set and the second home appliance to control the transmission of audio data by the first home appliance for output as sound by the second home appliance." None of *Salazar*, *Grundvig*, or *Furukawa* teaches or suggests at least the claimed radio communication control protocol.

¹ The Office Action contains a number of statements reflecting characterizations of the related art and the claims. Regardless of whether any such statement is identified herein, Applicants decline to automatically subscribe to any statement or characterization in the Office Action.

Salazar discloses “a wireless and wired communications, command, control and sensing system 1 including a handset device 10 and a base station 25 for two way communication of sound, voice, and data to perform telephone communications, remote command and control of appliances and/or apparatuses, remote monitoring, intercom and paging operations, and security functions utilizing both radio and infra-red frequencies” (*Salazar*, col. 6 lines 31-38). *Salazar* continues, “[o]pen architecture software ... creates a generalized command and control protocol which makes it possible to interact, in a wireless mode, with any number of external devices that have compatible transceivers with wireless communications, command, control, and sensing handset 10” (*Salazar* col. 7, lines 14-19). However, the protocol disclosed in *Salazar* cannot correspond to the claimed protocol, because *Salazar* does not disclose a protocol that is used by a device that outputs sound to control another device that transmits audio data. *Salazar*, therefore, does not teach or suggest the claimed “radio communication control protocol [] used by the telephone set and the second home appliance to control the transmission of audio data by the first home appliance for output as sound by the second home appliance” as recited by claim 1.

Grundvig fails to cure the deficiencies of *Salazar*. *Grundvig* discloses “a cordless telephone handset that uses the same user input unit (e.g., keypad 107) for both user control of a cordless telephone system and for user control of a television.” However, *Grundvig* is silent as to any device used to control the television that also outputs audio data as sound. Therefore, *Grundvig* does not disclose the claimed “radio communication control protocol [] used by the telephone set and the second home

appliance to control the transmission of audio data by the first home appliance for output as sound by the second home appliance” as recited by claim 1.

Furukawa fails to cure the deficiencies of *Salazar* and *Grundvig*. *Furukawa* discloses a “remote control device [that] transmits encoded command messages to [a] vehicle communication module to command the performance of certain functions, such as locking/unlocking vehicle doors and opening/closing vehicle windows” (*Furukawa* col. 3, lines 27-31). However, *Furukawa* does not disclose that the remote control device outputs audio data as sound. Therefore, *Furukawa* does not disclose the claimed “radio communication control protocol [] used by the telephone set and the second home appliance to control the transmission of audio data by the first home appliance for output as sound by the second home appliance” as recited by claim 1.

Applicants traverse the Examiner’s alleged Official Notice at page 3 of the Office Action. The Examiner alleges, “[h]ome appliances, Official Notice taken by the Examiner, such as television, audio system, that support audio transmission or reception by the radio communication with second home appliances, are commonly known in the art as shown by *Zuquert*, U.S. Patent No. 6,466,832” (Office Action at p. 3). Applicants assert that such home appliances are not commonly known in the art, and that the Official Notice is improper. In addition, even assuming *Zuquert* teaches such home appliances, a rejection using *Zuquert* would be improper at least because the Examiner has not shown a motivation to combine *Zuquert* with the remaining references.

Although of different scope, independent claims 13, 14, and 26 recite features similar to those of claim 1. Claims 3-12 and 38-43 depend from claim 1, claims 16-25

depend from claim 14, and claims 28-37 depend from claim 26. As already discussed, the cited references fail to teach or suggest the claimed radio communication control protocol.

The dependent claims may further recite additional features not taught by the cited references.

For example, dependent claim 9 recites the telephone set according to claim 3, wherein the remote control signal is a "pause command to pause the transmission of audio data by the first home appliance." The cited references fail to teach or suggest this subject matter of claim 9.

The Examiner alleges, "stopping audio output by pausing the playing operation is well known in the art" (Office Action at p. 5). Even assuming this is the case, such pause operations do not involve pausing the transmission of audio data, but rather merely pausing the reproduction of audio data. Moreover, the cited references are silent as to any remote control signals that can be used to pause the transmission of audio data. Claims 22 and 34, although of different scope, recite subject matter similar to that recited by claim 9, and also distinguish the cited references.

Dependent claim 11 recites, "the telephone set according to claim 3, wherein the remote control signal further serves to execute another control for sending an incoming-call notice to the second home appliance, wherein audio data for the notice is generated by the telephone set and reproduced by the second home appliance." The Examiner alleges that *Grundvig* discloses this feature, citing to two portions of *Grundvig*. The first cited portion of *Grundvig* discloses, "a signal ... to control a television to display call related information associated with [an] incoming call" (*Grundvig* col. 6, lines 2-5). This

teaching relates to the display of call information, and not to the reproduction of audio data.

The second cited portion of *Grundvig* discloses, “a control signal from the second output device ... can cause the television to output a telephone call alert signal, such as a sound” (*Grundvig* col. 6, lines 57-60). However, *Grundvig* does not disclose that the control signal contains audio data, or that any audio data in the alert signal is generated by the second output device. Instead, this portion of *Grundvig* should be read as disclosing that the television contains audio data, not generated by the second output device, and that the second output device can send a control signal devoid of audio data to the television to cause the alert signal to sound. To the extent that the Examiner may be relying on principles of inherency in asserting that *Grundvig* discloses the audio data, Applicants remind the Examiner that MPEP § 2112 (IV) states: “In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art.” Here, the Examiner has not established any reason why the audio data in *Grundvig*’s alert signal must necessarily have been generated by the second output device. Claims 24 and 36, although of different scope, recite subject matter similar to that recited by claim 11, and also distinguish the cited references.

Dependent claim 8 recites, “the telephone set according to claim 1, further comprising a control signal acquisition means to send a request packet to the first home appliance identifying a first remote control command, and receive a command packet from the first home appliance indicating a remote control signal for implementing the

first remote control command.” The cited references fail to teach or suggest such a control acquisition means. *Salazar* discloses, “it is desirable to store approximately 270 different code sets that may be used by handset 10 to remotely communicate with major brand TV sets” (*Salazar* col. 7, lines 60-63). *Salazar*, however does not disclose that the code sets include a remote control signal received from a remotely-controllable first home appliance. The remaining references fail to cure the deficiencies of *Salazar*. Claims 21 and 33, although of different scope, recite subject matter similar to that recited by claim 8, and also distinguish the cited references.

Dependent claim 43 recites, “the telephone set according to claim 6, wherein a connection between the first home appliance and second home appliance is maintained when releasing the connection between the telephone set and the first home appliance.” The Examiner alleges, “[s]ince *Grundvig* suggests that when the handset is not necessar[ily] in use (by detecting a parallel set is in an off-hook state), the connection means releases the connection with the home appliance and the control means executes a control action for resuming the audio output of the home appliance” (Office Action at p. 7). Even assuming this is correct, it has no bearing on whether or not a connection is maintained between a first and second home appliance while releasing a connection between a telephone set and a first home appliance. Moreover, *Grundvig* is silent as to any device analogous to the claimed second home appliance, and thus necessarily fails to teach or suggest that “a connection between the first home appliance and second home appliance is maintained when releasing the connection between the telephone set and the first home appliance.” The remaining references fail to cure the deficiencies of *Grundvig*.

Dependent claim 42 recites, "the telephone set according to claim 1, wherein the telephone set is a master device for determining a frequency hopping sequence and the first appliance is a slave device in a first network, and the first appliance is a master device and the second appliance is a slave device in a second network." The Examiner cites to *Salazar* and states, "the telephone set is a master device and the first appliance is a slave device in a first network (the telephone set control the first appliance) ... and the first appliance is a master device and the second appliance is a slave device in a second network" (Office Action at pp. 7-8). Applicants submit that remote control of one device by another does not establish a master/slave relationship consistent with the understanding of those of ordinary skill in the art. Moreover, claim 42 has been amended to recite a "master device for determining a frequency hopping sequence." *Salazar* is silent as to a frequency hopping sequence. The remaining references fail to cure the deficiencies of *Salazar*.

The Examiner concedes that the cited references fail to teach or suggest the subject matter of claims 39-41, and relies on Official Notice to support the rejection of these claims (Office Action at p. 8). Applicants respectfully traverse the taking of Official Notice.

Claim 39 recites, "the telephone set according to claim 1, wherein the connection means transmits a message to determine if the first home appliance is within communication range." The Examiner states, "the technique of detecting in-range device by transmitting inquiry message ... [is] well known in the art," but does not provide documentation to support this assertion (Office Action at p. 8). M.P.E.P 2144.03(A) indicates, "[o]fficial notice unsupported by documentary evidence should

only be taken by the examiner where the facts asserted to be well-known, or to be common knowledge in the art are capable of instant and unquestionable demonstration as being well-known,” and continues, “[i]f applicant adequately traverses the examiner’s assertion of official notice, the examiner must provide documentary evidence in the next office action.” Applicants disagree that a telephone set that transmits a message to determine if a first home appliance is within communication range is well-known in the art. Applicants therefore submit that the Official Notice is improper with respect to claim 39.

Claim 40 recites, “the telephone set according to claim 1, wherein the first home appliance is not remote-controllable until an authentication procedure is executed between the telephone set and the home appliance.” The Examiner alleges, “the method of controlling access by executing an authentication procedure to verify a preset password (ID) [is] known in the art” (Office Action at p. 8). Applicants disagree that an authentication procedure between a telephone set and a device analogous to the claimed first home appliance is well-known in the art, and submit that the taking of Official Notice is improper with respect to claim 40.

Claim 41 recites, “the telephone set according to claim 40, wherein the authentication procedure is to verify a password preset in the telephone set and the first home appliance.” Applicants disagree that a telephone set with a preset password used in an authentication procedure with a home appliance is well-known in the art, and submit that the taking of Official Notice is improper with respect to claim 41.

Because the cited references fail to teach or suggest each and every element of the claims, no *prima facie* case of obviousness has been established with respect to

these claims. Applicants therefore request the Examiner to withdraw the rejection of claims 1, 3-14, 16-26, and 28-37 under 35 U.S.C. § 103(a).

Applicants respectfully traverse the rejection of claims 2, 15, and 27 under 35 U.S.C. § 103(a).

Claim 2 depends from claim 1. As discussed above, none of *Salazar*, *Grundvig*, or *Furukawa* discloses a “radio communication control protocol [] used by the telephone set and the second home appliance to control the transmission of audio data by the first home appliance for output as sound by the second home appliance.”

Hill discloses using “Bluetooth” as a communication protocol to reduce server workloads. However, *Hill* does not disclose using Bluetooth for audio transmitting audio data. Therefore, *Hill* fails to teach or suggest the claimed “radio communication control protocol [] used by the telephone set and the second home appliance to control the transmission of audio data by the first home appliance for output as sound by the second home appliance.”

Although of different scope, claims 15 and 27 recite features similar to those of claim 2. As already discussed, none of the cited references teaches or suggests a first home appliance which supports audio transmission or reception by radio communication with a second home appliance.

Because the cited references fail to teach or suggest each and every element of the claims, no *prima facie* case of obviousness has been established with respect to these claims. Applicants therefore request the Examiner to withdraw the rejection of claims 2, 15, and 27 under 35 U.S.C. § 103(a).

In view of the foregoing remarks, Applicants respectfully request reconsideration of this application and the timely allowance of the pending claims.


Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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